EUS/GJ/P/09-6094

**Amendments to the Claims:** 

This listing of claims will replace all prior versions, and listings, of claims in the

application:

**Listing of Claims:** 

. (Currently Amended) A device system for Multimedia authentication of a

user equipment accessing a Multimedia domain through an access network, the device

associated with a subscriber server of the access network holding authentication data

for the user equipment and accessible to the Multimedia domain, the device comprising:

means for authentication subscriber server for first authenticating said user

equipment by the subscriber server within said access network, said subscriber server

authorizing said user equipment to gain access to said access network wherein said

subscriber server storing authentication data associated with said user equipment;

means for deciding that an implicit authentication between the user equipment

and a serving call session control function (S-CSCF) of the Multimedia domain can take

place based on said previous first authentication of the user equipment by the access

network thus skipping the needs for an explicit authentication with the Multimedia

<del>domain</del>; and

means for instructing the S-CSCF a serving entity in charge of authenticating the

user equipment in the Multimedia domain that implicit authentication can take place of

the user equipment can take place by re-using said authentication data stored in the

subscriber server and to not perform any explicit authentication between said S-CSCF

and said user equipment.

2. (Original) The device of claim 1, wherein the means for deciding that an

implicit authentication can take place includes

means for determining the potential security of the signalling path to access the

Multimedia domain through said access network.

3. (Previously Presented) The device of claim 1, wherein the means for

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instructing the S-CSCF serving-entity that the implicit authentication can take place

includes means for indicating that the final decision is on the user equipment side which

can force an explicit authentication.

(Currently Amended) The device of claim 1, wherein the means for 4.

instructing the serving entity S-CSCF that the implicit authentication can take place

includes

means for indicating that this is a final decision taken by the network and no

explicit authentication can be carried out.

5. The device of claim 1, further including means for (Previously Presented)

notifying the user equipment that the implicit authentication of the user equipment for

accessing the Multimedia domain can be carried out by the network.

6. (Previously Presented) The device of claim 1, wherein the means for deciding

that the implicit authentication between the user equipment and the Multimedia domain

can take place includes

means for receiving a proposal of implicit authentication originated from the user

equipment.

7. (Previously Presented) The device of claim 3, further comprising means for

receiving an indication originating from the user equipment to confirm the acceptance of

the implicit authentication proposed by the network.

8. The device of claim 7, further comprising means for (Currently Amended)

indicating to the serving entity S-CSCF in charge of authenticating the user in the

Multimedia domain that the user has confirmed the implicit authentication.

9. (Currently Amended) The device of claim 8, further comprising means for

providing additional authentication data to said S-CSCF serving-entity, said additional

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authentication data including at least one of authentication type; access information; and

authentication timestamp.

10. (Currently Amended) A user equipment enabled to obtain access to a Multimedia domain through an access network, and arranged to carry out a first explicit authentication procedure with the access network and a second explicit authentication procedure with the Multimedia domain, the user equipment comprising means for processing:

means for first explicitly authenticating with a subscriber server within said access network, said subscriber server authorizing said user equipment to gain access to said access network wherein said subscriber server storing authentication data associated with said user equipment;

a notification received from the Multimedia domain indicating that an implicit authentication for the user equipment can be carried out by the network based on the first explicit authentication procedure with the access network <u>by re-using said authentication data stored in said subscriber server</u> and notifying the user equipment not to perform the second explicit authentication procedure with the multimedia domain.

- 11. (Previously Presented) The user equipment of claim 10, wherein the means for processing the notification received from the Multimedia domain includes means for receiving and processing an Implicit Authentication indication that the final decision is on the user equipment which can force an explicit authentication.
- 12. (Previously Presented) The user equipment of claim 11, further comprising means for sending towards the Multimedia domain an Single Sign On (SSO) enabled indication to confirm the acceptance of the implicit authentication proposed by the network.

13. (Previously Presented) The user equipment of claim 12, further comprising means for providing additional authentication data towards the Multimedia domain, said additional authentication data including at least one of

authentication type;
access information; and
authentication timestamp.

- 14. (Previously Presented) The user equipment of claim 10, wherein the means for processing the notification received from the Multimedia domain includes means for receiving and processing the indication of Implicit Authentication by the network that the implicit authentication is a final decision taken by the network and no explicit authentication can be carried out.
- 15. (Currently Amended) A method for authenticating a user equipment accessing a Multimedia domain through an access network, the method comprising the steps of:

first authenticating the user equipment with a subscriber server in the access network where the user equipment accesses through the access network having a subscriber server with authentication data for the user equipment and accessible to the Multimedia domain, said subscriber server authorizing said user equipment to gain access to said access network wherein said subscriber server storing authentication data associated with said user equipment;

registering the user equipment into the Multimedia domain;

deciding that an implicit authentication between the user and <u>a service call</u> <u>session control function (S-CSCF) of</u> the Multimedia domain can take place based on the <u>previous\_first\_authentication</u> of the user equipment in the access network<del>, thus skipping the needs for an explicit authentication with the Multimedia domain;</del> and

instructing the S-CSCF in the multimedia domain that implicit authentication of the user equipment can take place by re-suing said authentication data stored in the subscriber server and to not perform any explicit authentication between said S-CSCF

and said user equipment a serving entity in charge of authenticating the user in the Multimedia domain that implicit authentication can take place.

16. (Previously Presented) The method of claim 15, further comprising a step of notifying from the Multimedia domain to the user equipment that implicit authentication of the user equipment for accessing the Multimedia domain can be carried out.

17. (Previously Presented) The method of claim 15, wherein the step of deciding that the implicit authentication can take place includes a step of determining the potential security of the signalling path to access the Multimedia domain through said access network.

18. (Previously Presented) The method of claim 15, wherein the step of deciding that the implicit authentication can take place includes a step of proposing from the user equipment towards the Multimedia domain an implicit authentication to be carried out between said user equipment and Multimedia domain.

19. (Currently Amended) The method of claim 15, wherein the step of instructing the serving entity <u>S-CSCF</u> that the implicit authentication can take place includes a step of indicating that the Implicit Authentication is a final decision taken by the network and no explicit authentication can be carried out.

20. (Currently Amended) The method of claim 15, wherein the step of instructing the serving entity <u>S-CSCF</u> that the implicit authentication can take place includes a step of indicating that the final decision is on the user equipment which can force an explicit authentication.

21. (Previously Presented) The method of claim 20, further comprising a step of confirming from the user equipment acceptance of the implicit authentication proposed by the network.

- 22. (Currently Amended) The method of claim 21, further comprising a step of indicating to the <u>S-CSCF</u> serving entity in charge of authenticating the user equipment in the Multimedia domain that the user equipment has confirmed the implicit authentication.
- 23. (Currently Amended) A serving entity service call session control function (S-CSCF) in charge of authenticating a user equipment in the Multimedia domain when the user equipment accesses thereto through an access network where said user equipment had been previously authenticated within the access network, the serving entity comprising:

means for receiving and processing instructions originating from a device subscriber server within said access network, wherein said subscriber server for performing said previous authentication of said user equipment for gaining access to said access network and for storing authentication data associated with said user equipment, for Multimedia authentication of a user equipment—said instructions indicating that an implicit authentication can take place based on the previous authentication of the user equipment by the access network and by re-using said authentication data stored in the subscriber server; and

means for notifying the user equipment that an implicit authentication of the user equipment for accessing the Multimedia domain can by carried out by the network and to not perform any explicit authentication between said S-CSCF and said user equipment.

- 24. (Currently Amended) The serving entity <u>S-CSCF</u> of claim 23, also comprising means for receiving an indication originated from the user equipment to confirm acceptance of the implicit authentication proposed by the network.
- 25. (Currently Amended) The serving entity <u>S-CSCF</u> of claim 23, further comprising means for receiving an indication originating from the device for Multimedia

authentication of the user equipment indicating that the user equipment has confirmed the implicit authentication.

- 26. (Currently Amended) The serving entity <u>S-CSCF</u> of claim 25, further comprising means for checking the matching of additional authentication data respectively received from the device for Multimedia authentication of the user equipment and from the user equipment for providing an extra security support.
- 27. (Currently Amended) The serving entity <u>S-CSCF</u> of claim 26, wherein said additional authentication data include at least one of

authentication type; access information; and authentication timestamp.

28. (Currently Amended) The serving entity <u>S-CSCF</u> of claim 23, wherein the means for notifying the user equipment that the implicit authentication can by carried out by the network includes means for indicating to the user equipment that the implicit authentication is a final decision taken by the network and no explicit authentication can be carried out.

29-34. (Cancelled)

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